REMARKS

Claims 1-50 are pending. Claims 1, 2, 5, 6, 19, 20, 33, 34, 37, and 38 are amended. No claims are canceled.

Claims 1-50 are rejected as being unpatentable over a combination of *Breish*, *Aikawa*, *Pasco et al.*, *Melen et al.*, *Pearlstein et al.*, *Lee*, *Yabe et al.*, and/or *Mackinnon*.

Specifically in regard to claim 2 (and by extension claims 6, 20, 34 and 38), the Office Action explains that *Aikawa* "discloses selecting one or more of the individual images from the index, rescanning each of the selected individual images at a relatively high resolution and generating a high resolution output of each of the selected individual images (*Aikawa* col. 16, lines 32-54)." The Office Action then asserts that it, "would have been obvious ...to combine the re-scanning of the image selected from an index at a high resolution as taught by *Aikawa* with *Breish*'s image extraction method in order to have a method which only scanned selected images at a high resolution."

Applicants respectfully disagree, and point out that the teachings of *Breish* are in direct conflict with those of *Aikawa*. That is, *Breish* directly teaches against rescanning of selected regions. *Breish* explains that rescanning is a main source of delay and difficulty in the transfer of images from one medium to another (col. 2, lines 11-32). Therefore, *Breish* discloses a system wherein a high resolution scan of an a first medium is made (setup station 100 in Fig. 1), the high resolution scan data is stored in an intermediary memory (120, Fig. 1), the high resolution scan data is used to generate down-converted thumbnail representations of the high resolution data for examination and correction (140, Fig. 1), and any needed corrections are made to the high resolution image in the intermediary memory (120) without requiring rescanning. The resultant, corrected image is transferred to a destination memory (160, Fig. 1). *Breish* explains in col. 2, lines 40-51 that his invention is

> "...directed to a method and apparatus for scanning multiple images located on a first medium so that they can be automatically stored on a second medium ... <u>without the need ... to relocate and rescan images</u> of the first medium which were improperly scanned or missed entirely. According to

> exemplary embodiments of the present invention, multiple images are scanned from a first medium as a block of image data so that cut, cropped or missed images, as detected by the user at the quality assurance station, need not be rescanned. (underlining added.)

Again in col. 5, lines 42-55, *Breish* explains,

> "[i]n accordance with a significant aspect of the present invention, when the user adds or adjusts boundaries of a particular image which were not properly recognized at the scanning device, the image data which would have been cut, cropped or misfed need not be rescanned. Rather, because the individual images were scanned with high resolution in blocks, the high resolution image data buffered in storage device 120 merely needs to be resegmented into appropriate images and correlated to the proper boundary data as verified at the quality assurance station.
>
> Thus, the microfiche need not be replaced into the scanning device so that a highly trained operator can relocate and rescan any cut, cropped or missed images." (underlining added.)

Breish emphasizes this object of his invention in col. 9, lines 42-44, where he clearly explains,

> "[b]ecause data from the original microfiche is acquired in blocks, the user need not rescan the microfiche images to acquire complete image data after an adjusted image boundary has been set." (underlining added.)

Since *Breish* directly teaches away from the teachings of *Aikawa*, Applicants assert that it is not obvious, nor proper, to combine the teachings of *Aikawa* with those of *Breish*. Thus, the limitation of claim 2 describing the rescanning of only the selected indexed images has been incorporated into its base claim 1. Similar limitations have been moved from claim 6 to claim 5, from claim 20 to claim 19, from claim 34 to claim 33, and from claim 38 to claim 37.

In regard to claim 10 (and by extension claims 24 and 42), the Office Action explains that *Aikawa* "fails to expressly disclose a smoothing filter which only smooths the R data. Lee, however, discloses a low-pass filter (smoothing filter) which operates only on the red channel (Lee col. 6, lines 13-15)."

Applicants respectfully disagree, and point out that the cited *Lee* excerpt in its entirely (lines 12-19) states,

> "[t]he vertical detail component extracting means 12 in the **red** channel comprises a vertical highpass filter 13 and a horizontal **lowpass filter 14**, the vertical detail component extracting means 22 in the **green** channel comprises a vertical highpass filter 23 and a horizontal **lowpass filter 24**, and the vertical detail component extracting means 32 in the **blue** channel comprises a vertical highpass filter 33 and a horizontal **lowpass filter 34**." (emphasis added.)

The *Lee* excerpt cited by the Office Action clearly describes a low pass filter (which the Office Action equates to a smoothing filter) applied to each of the Red, Green, and Blue components. Thus, Applicants are at a loss to determine how *Lee* can be asserted to teach applying a low pass filter only to the Red component, as is required in the present invention. Applicants thus contend that the limitations of claims 10, 24, and 42 are also not taught or suggested by the cited prior art, singularly or in combination.

In regards to claim 23 (and by extension claims 9 and 41), the Office Action concedes that *Breish* does not expressly disclose darkening the pixels in, or within a predetermined distance from, the outer most row/column of pixels representing the holder. However, the Office Action asserts that *Pearlstein* "discloses framing an image with black borders within a predetermined distance from the outer most row/column of pixels representing the image (Pearlstein col. 7, lines 48-50)." Applicants respectfully point out that the cited *Pearlstein* excerpt merely states that video frames often have black borders. That is, video frames (i.e., film strips) have black borders around image cells. *Pearlstein* does not teach nor suggest adding black boarder to scanned images of video frames, as is required by the present invention. Rather, *Pearlstein* is explaining that video frames already have black boarders. This is clear from the cited *Pearlstein* excerpt of col. 7, lines 48-52, where it states,

> "[a]s discussed above, black borders in the form of, e.g., 1-3 rows of black pixels, can be found in many video frames. FIG. 5 illustrates a video frame with a 3 pixel wide border of back pixels represented by the crosshatched portions of the frame 500." (underlining added.)

Thus, *Pearlstein* neither teaches nor suggests adding a black border to scanned images, but merely points out that video frames often have black frames. Thus, applicants assert that the features of claims 9, 23, and 41 are not taught or suggested by the cited prior art, singularly or in combination.

In view of the foregoing, it is respectfully submitted that this Response clearly places this application in condition for allowance without raising any new issue. The entry of this Response is therefore believed proper in accordance with 37 C.F.R. §1.116, and entry is respectfully requested. Should the Examiner believe that any issue(s) remain outstanding, he is encouraged to contact Applicants' undersigned attorney in an effort to resolve such issue(s) and advance the case to issue.

Respectfully submitted,

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